

# Cycle 12 Proposal Statistics

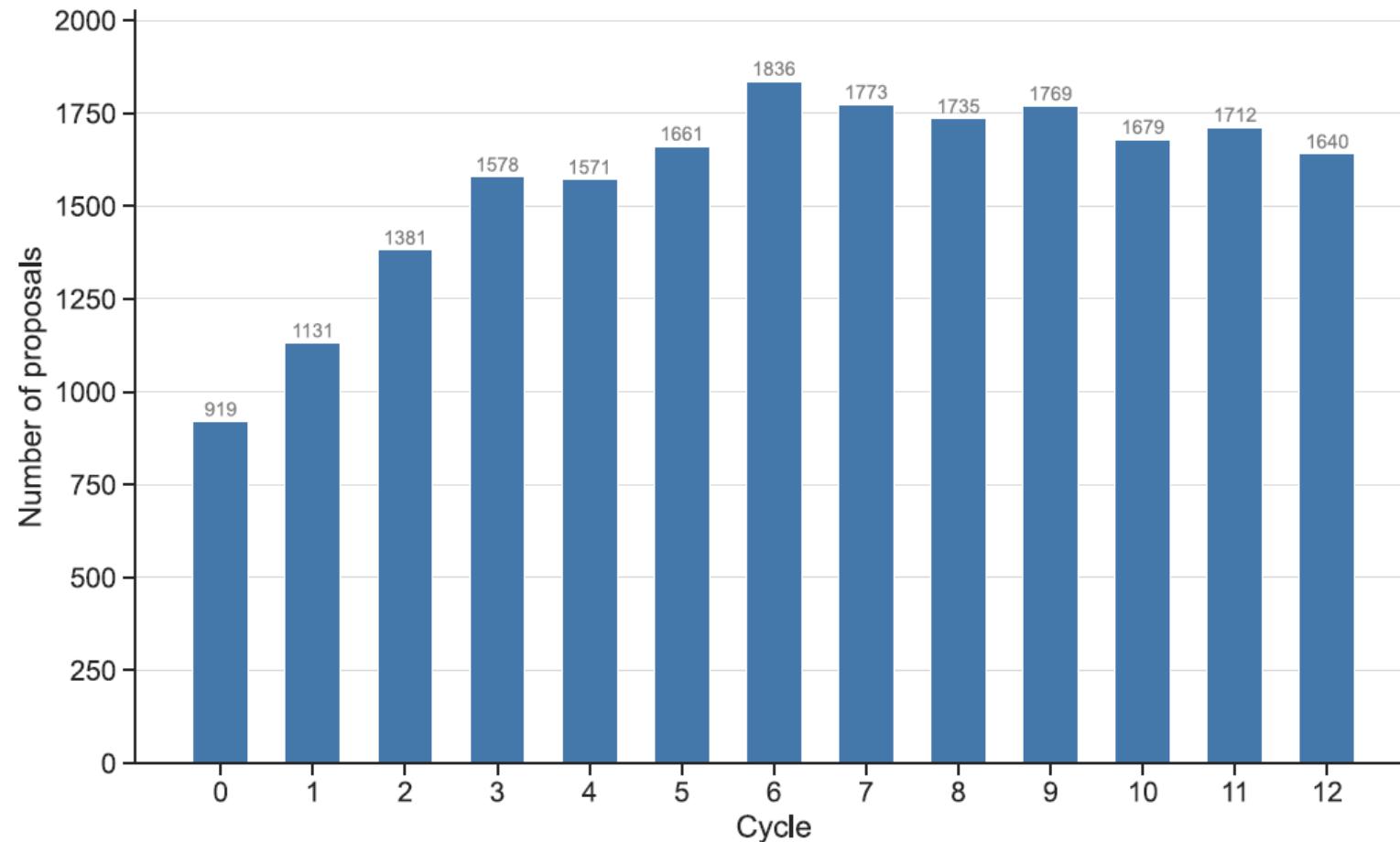
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(NAOJ ALMA Project)

Based on materials created by John Carpenter, Andrea Corvillón, and the Proposal Handing Team (JAO)



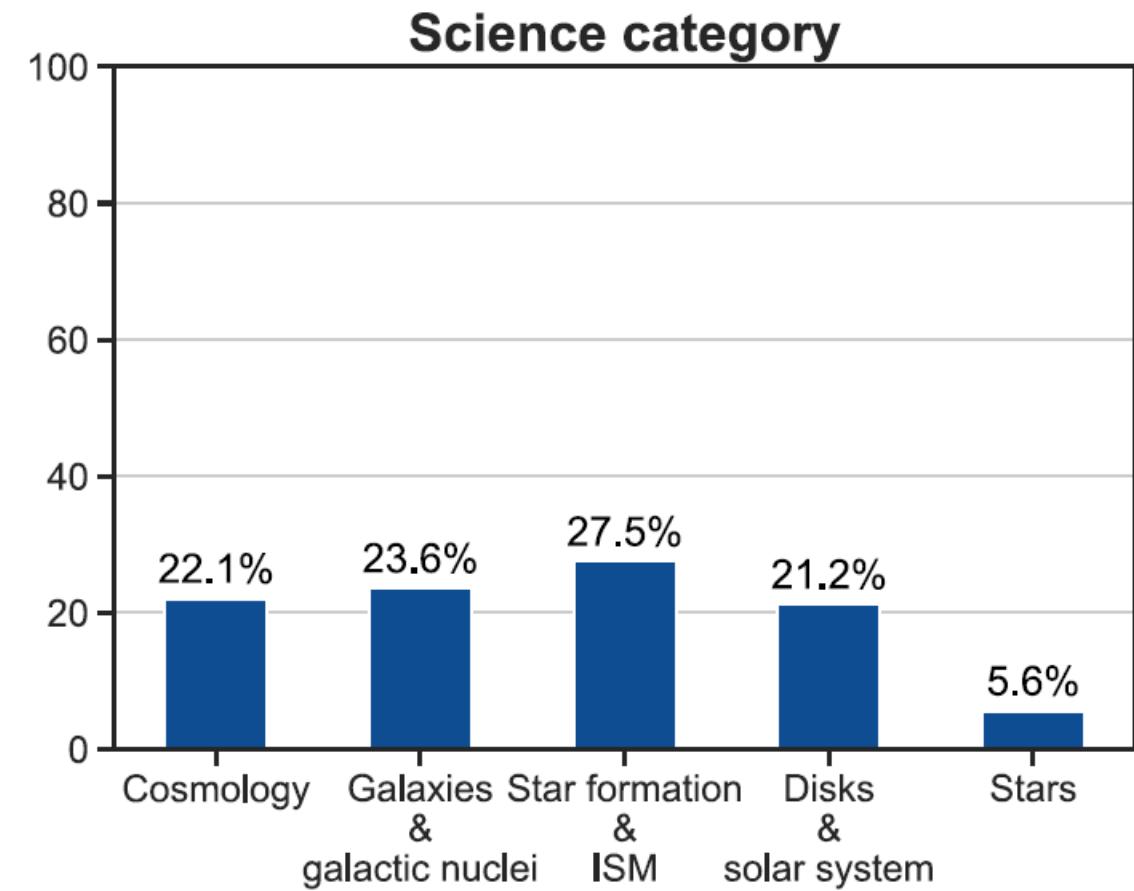
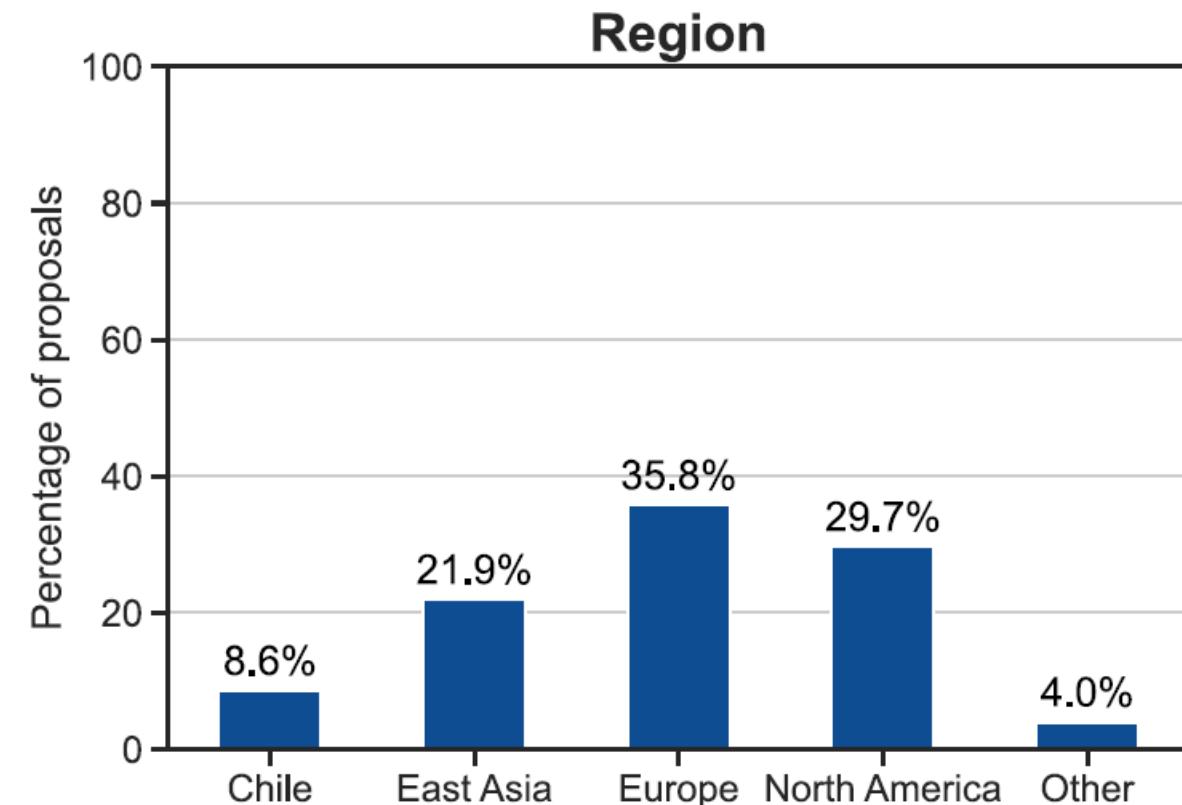
# Number of submitted proposals by Cycle

A total of 1640 proposals were submitted in Cycle 12





# Percentage of proposals by region and category



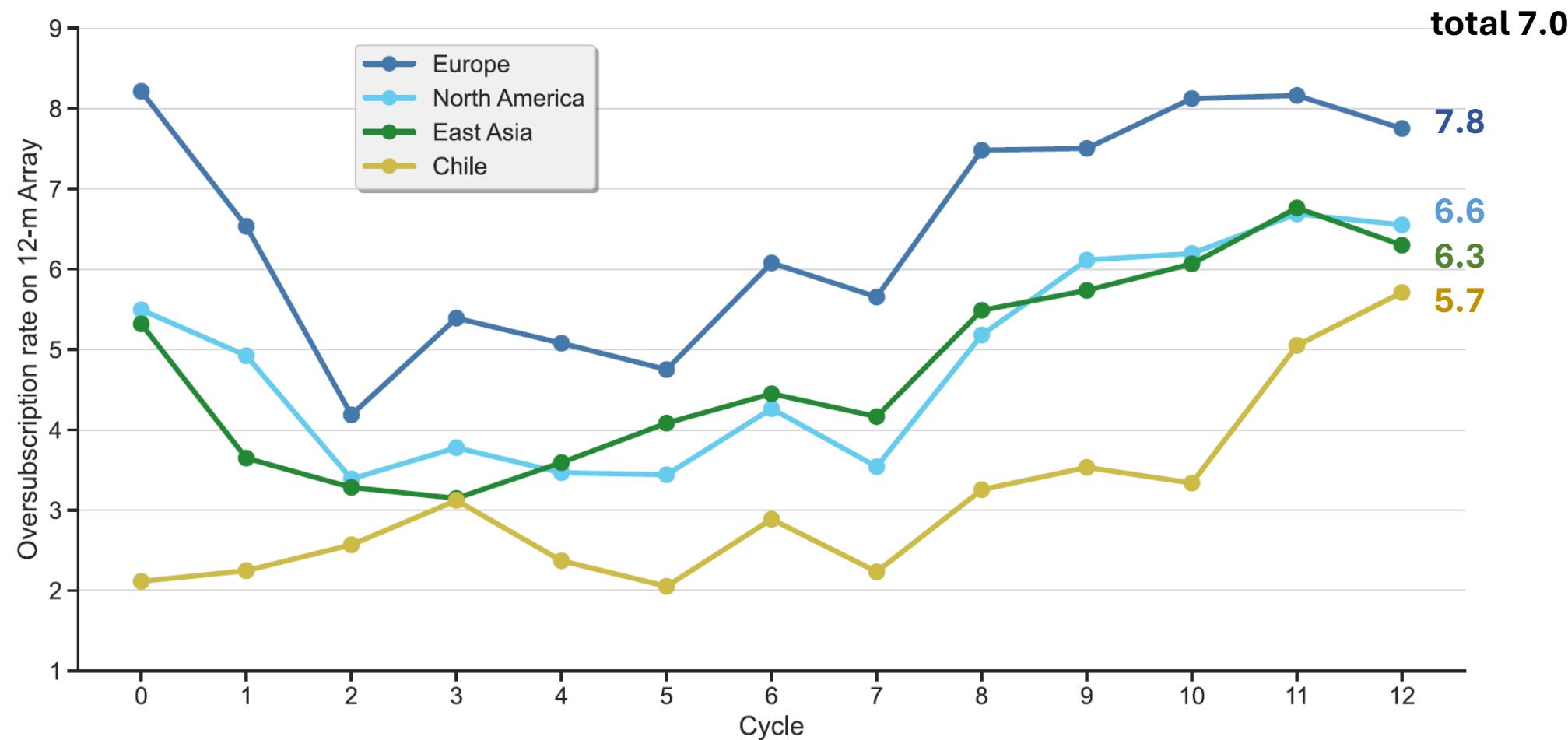
\*Percentages by region correspond to the regional affiliation of the Principal Investigator (PI) and co-PIs.





# Oversubscription rate by Cycle

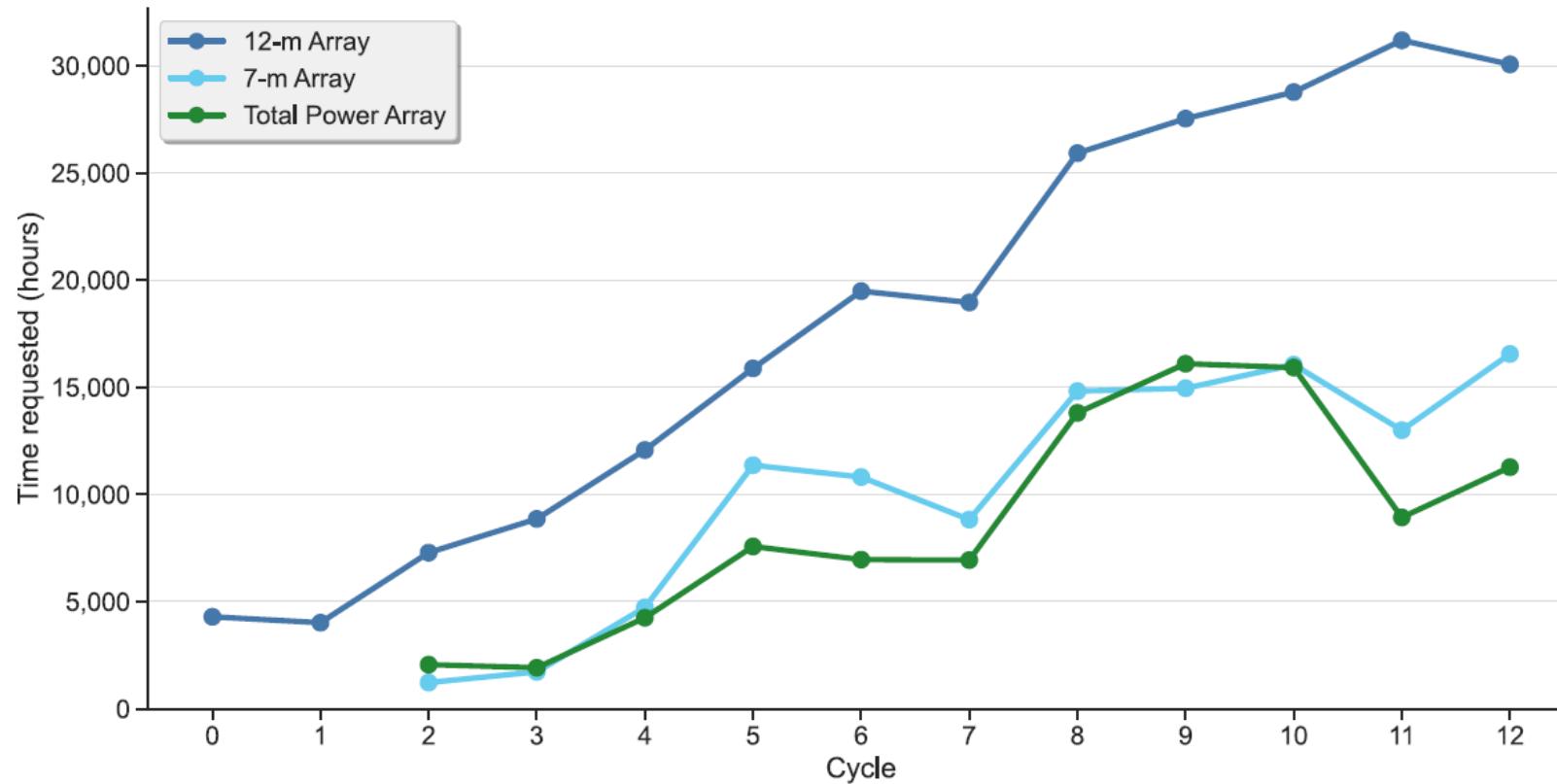
Continued high oversubscription rate in all regions





# Time requested by Cycle

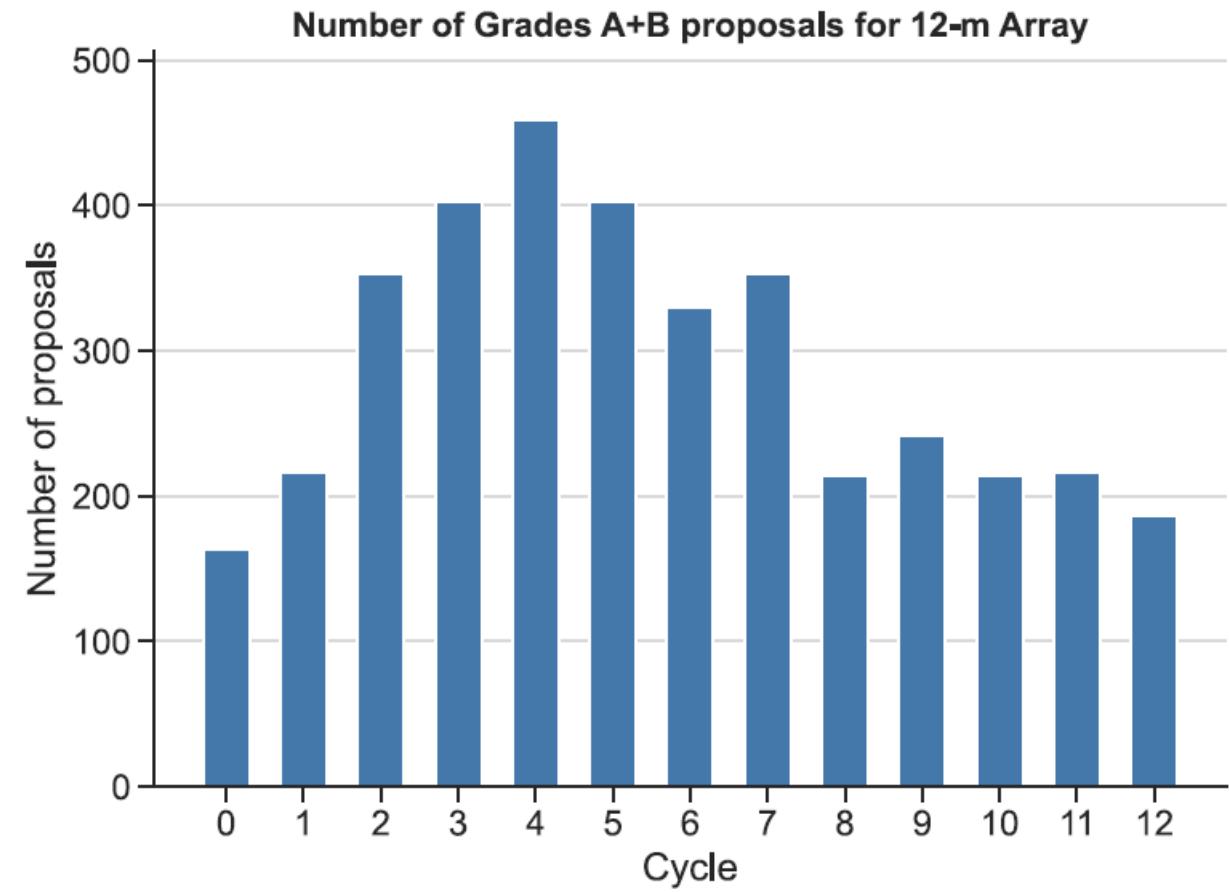
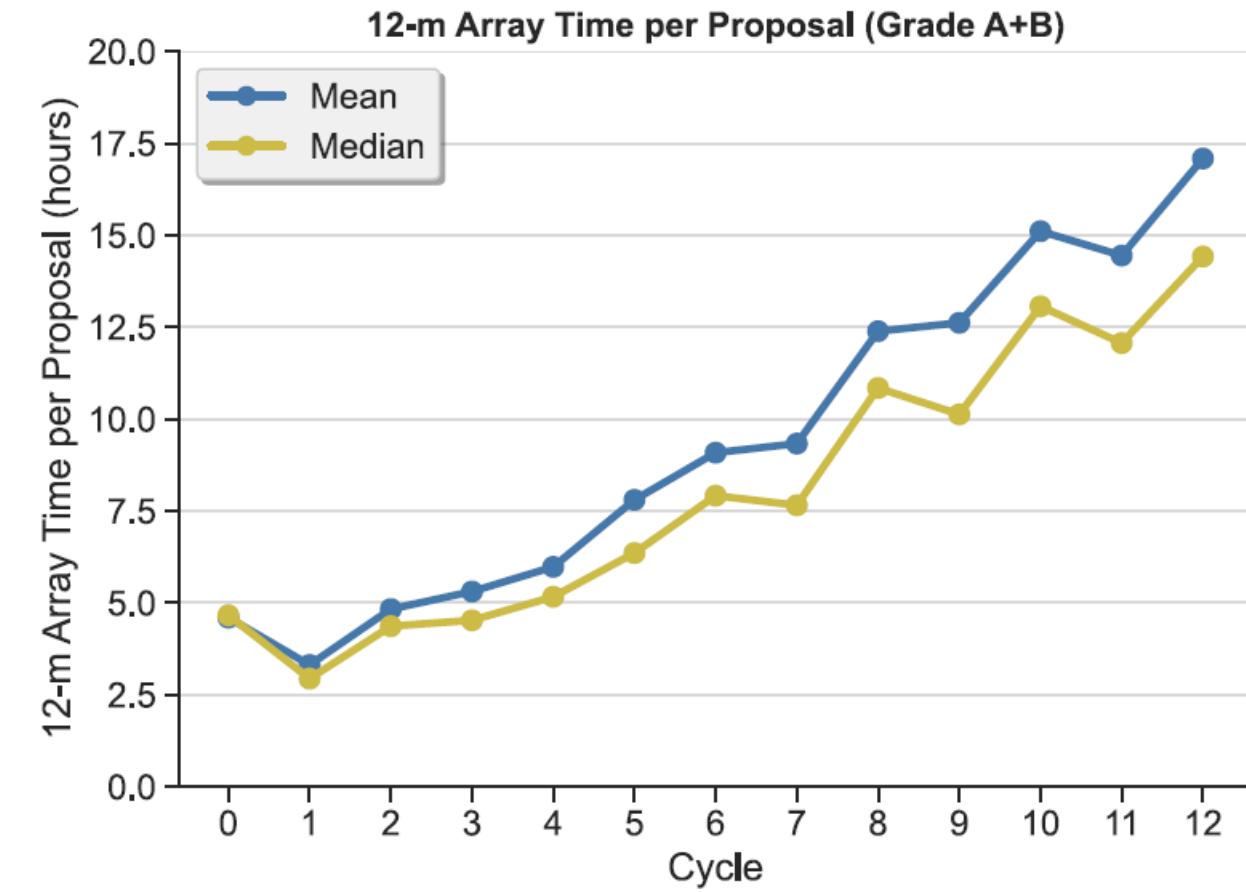
- Increase in the amount of requested time on 7-m and TP Arrays
  - Likely a result of pointing out in the CfP the high success rate of ACA proposals in Cycle 11





# Accepted (Grade A+B) proposals

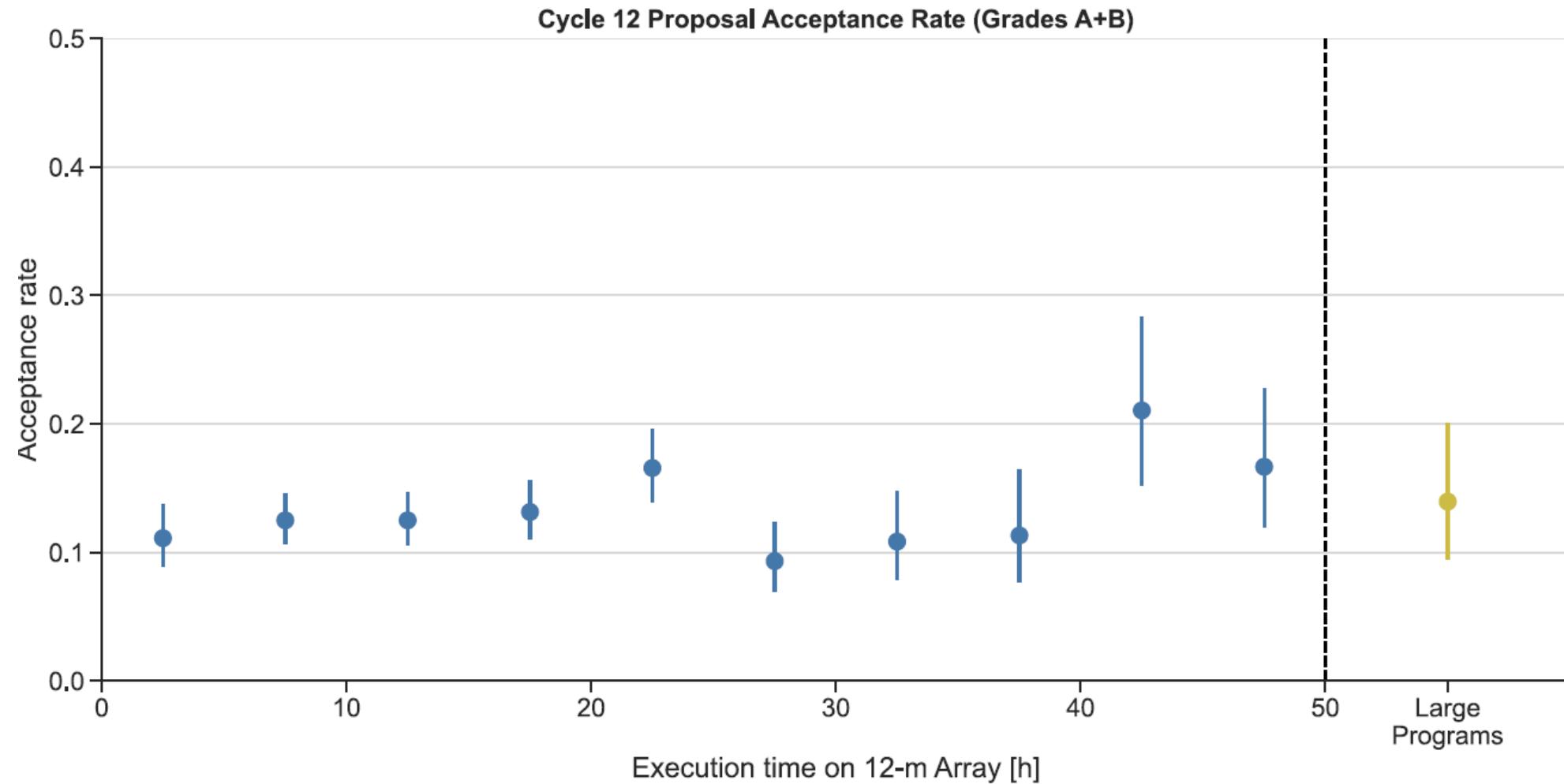
Typical size of the accepted proposals increased → fewer proposals accepted





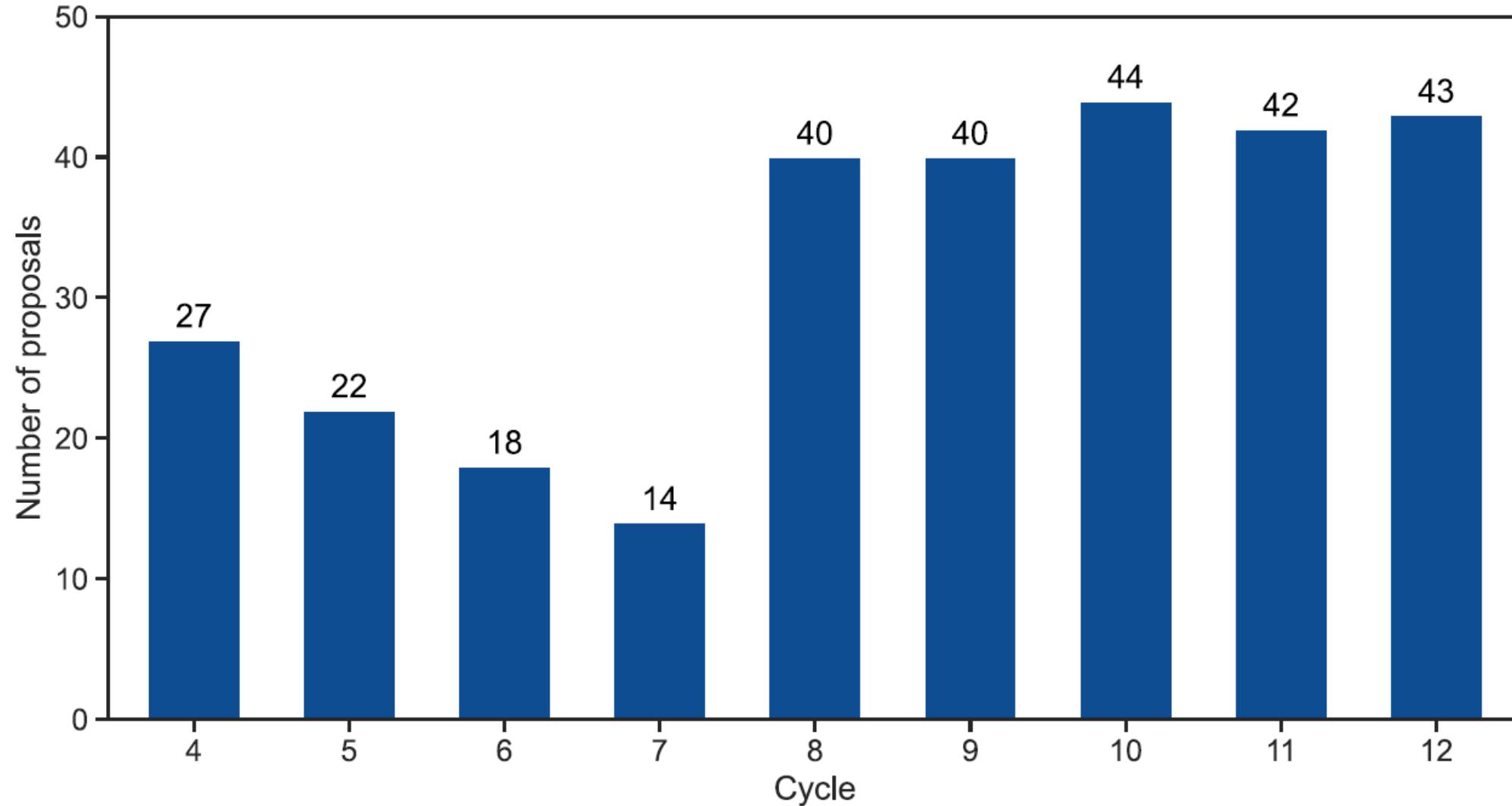
# Acceptance rate by requested 12-m Array time

Acceptance rate (Grade A+B) is largely independent of the requested 12-m array time.



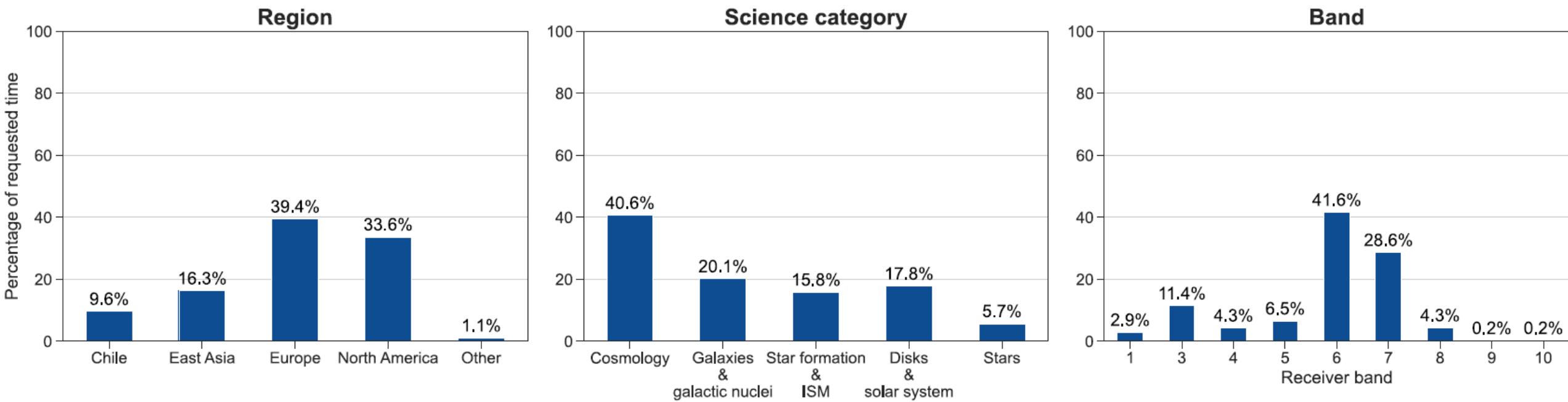


# Number of submitted Large Programs by Cycle





# Requested time for Large Programs: 12-m Array





# Large Programs (accepted)

Title	PI	Region	Category*
PHOENIX: the Emergence of Dust, Obscured Star Formation and ISM Physics at Cosmic Dawn	Schouws Sander (EU)	EU CL EA NA	10
Panta Rei: Following the flow of star cluster formation	Peretto Nicolas (EU)	EU CL EA	31
Meet in the Middle: An ALMA Treasury of Mid-Stage Mergers	Linden Sean (NA)	NA EU CL EA OTHER	20
The 10 pc Survey of Molecular Clouds and Stellar Feedback	Leroy Adam (NA)	NA EU	20
DMOST: Disks around the MOST common stars	Kurtovic Nicolas (EU)	EU CL NA	41
HIDING in the HUDF: High-definition Dust Imaging of Normal Galaxies in the Hubble Ultra Deep Field	Boogaard Leindert (EU)	CL EU NA	10

\*Category:

10=Cosmology and the high redshift universe

20=Galaxies and galactic nuclei

31=Interstellar medium, star formation, and astrochemistry

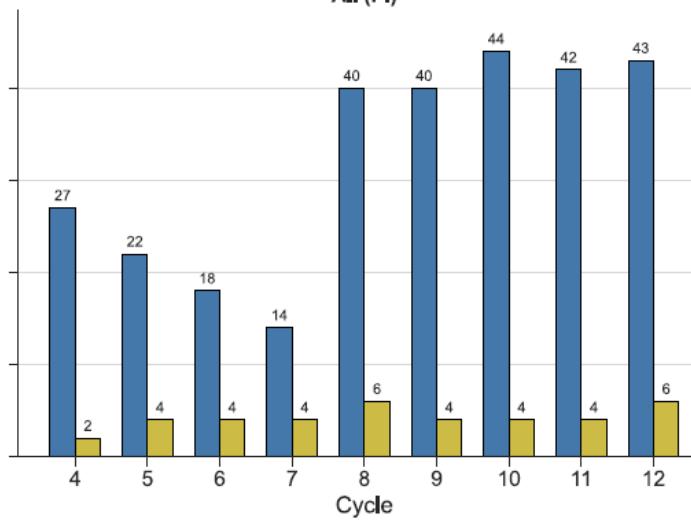
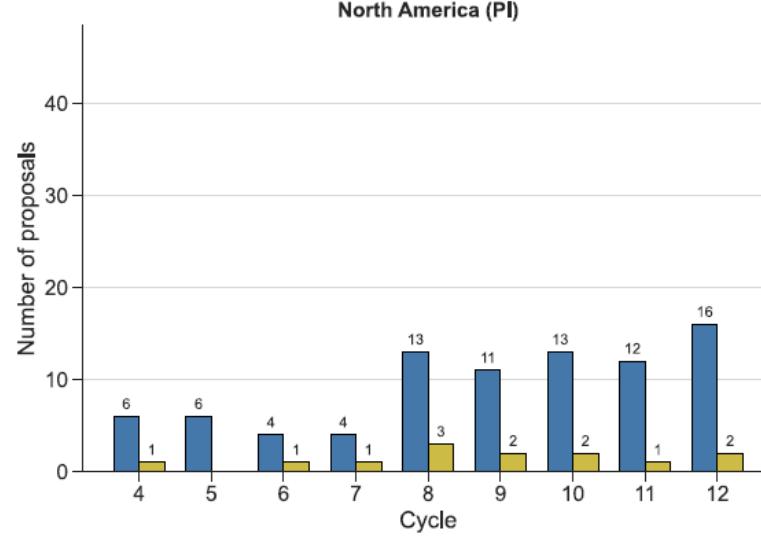
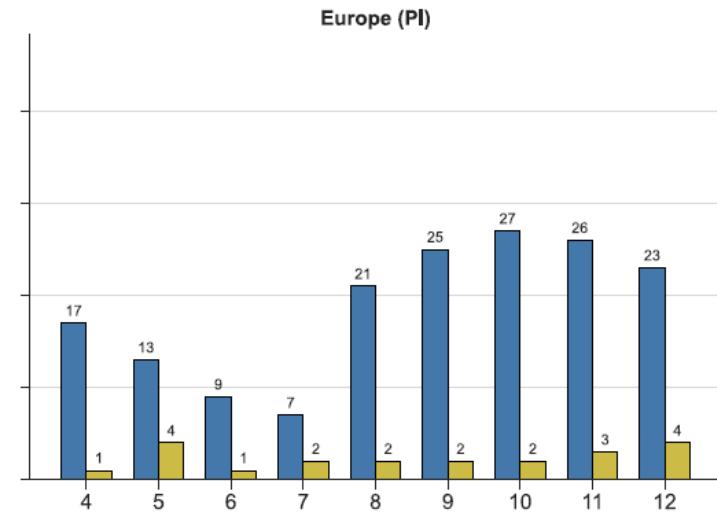
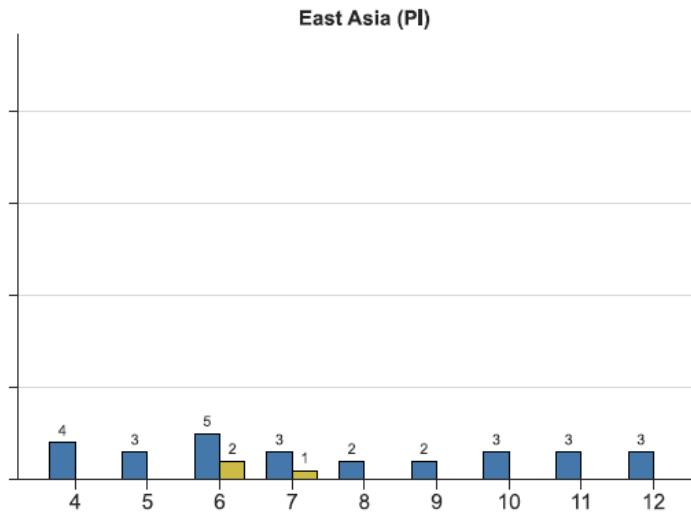
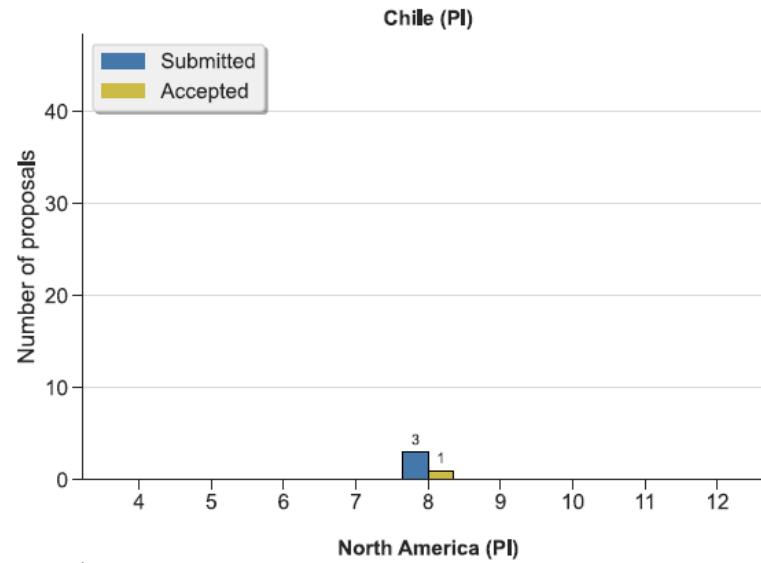
41=Circumstellar disks, exoplanets, and the solar system

50=Stellar evolution and the Sun





# Distribution of Large Program PIs by Cycle





# Joint Proposals

- 79 Joint Proposals submitted
  - 2 proposals requested time on 2 or more partner observatories
- 12 proposals were accepted (Grade A & B)

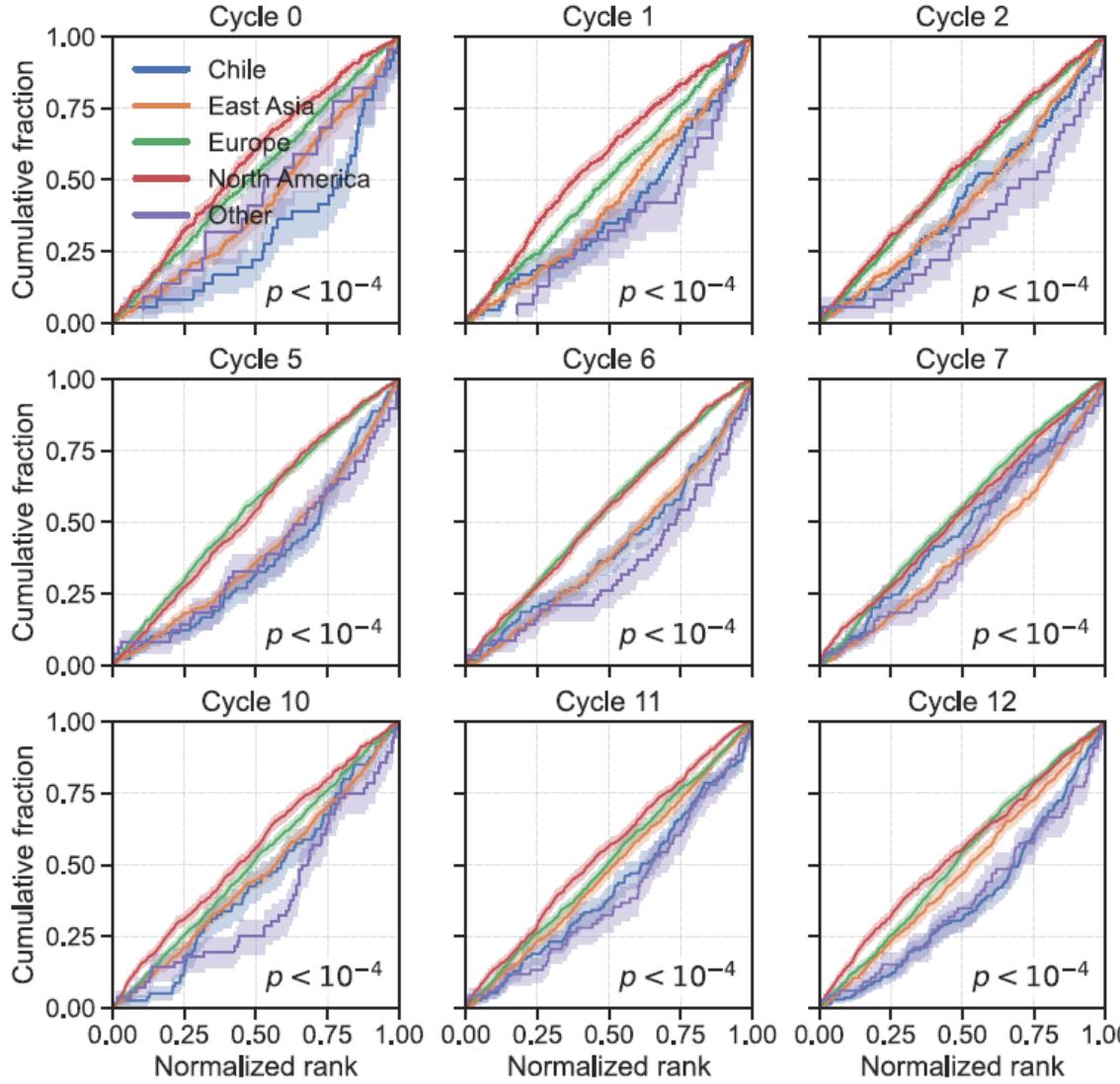
Partner Observatory	Number of proposals accepted
JWST	8 (71 h)
VLA	2 (10 h)
VLT	2 (8 h)

# Systematics in Overall Rankings





# Difference in rankings between by region

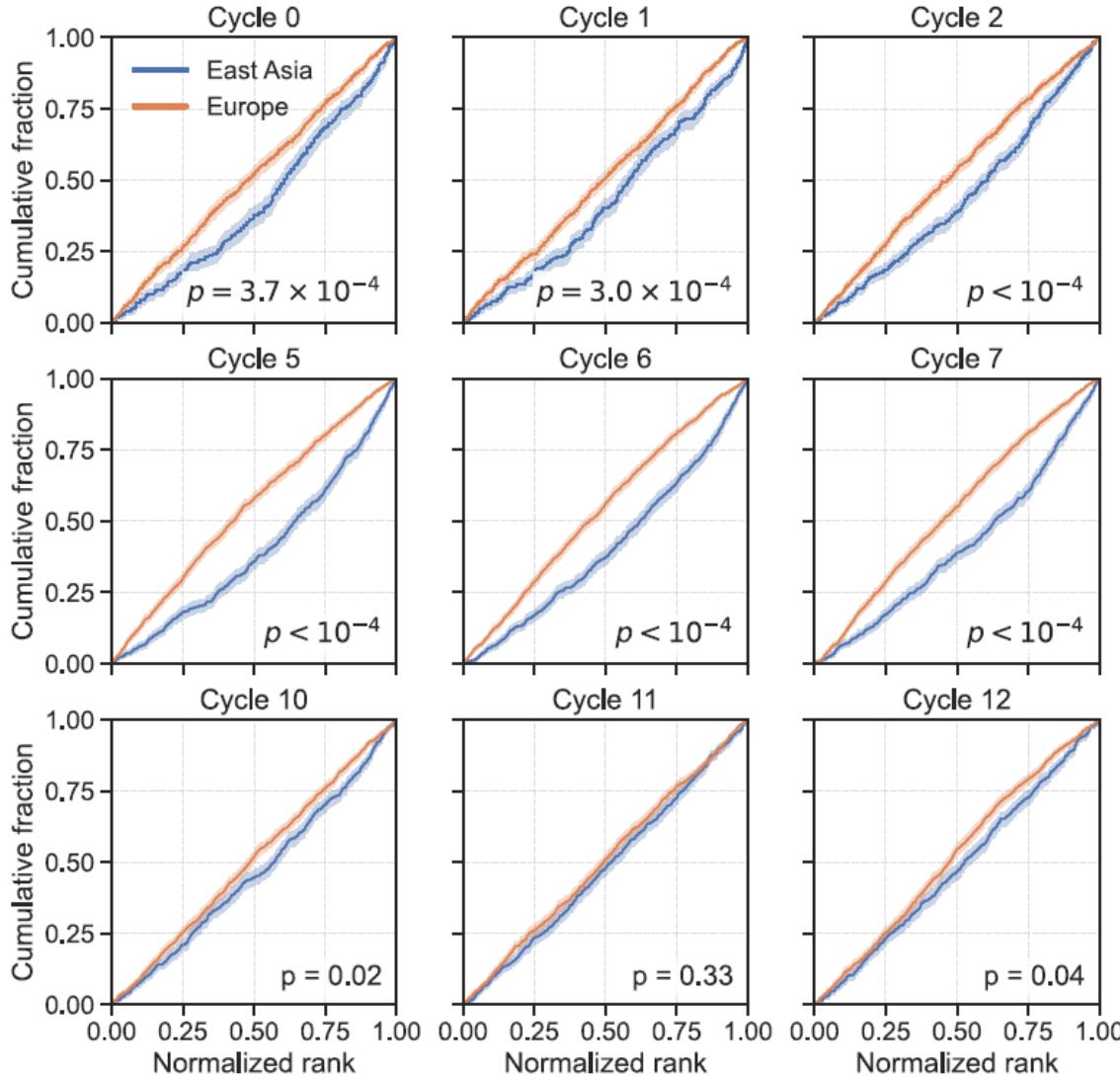


- Cumulative distribution of ranks by cycle
- Curves shifted to the upper left have better ranks

- NA continues to have better-than-average overall ranks
- Chile and open skies tend to have below-average ranks
- Trend for EA is still positive (see next)



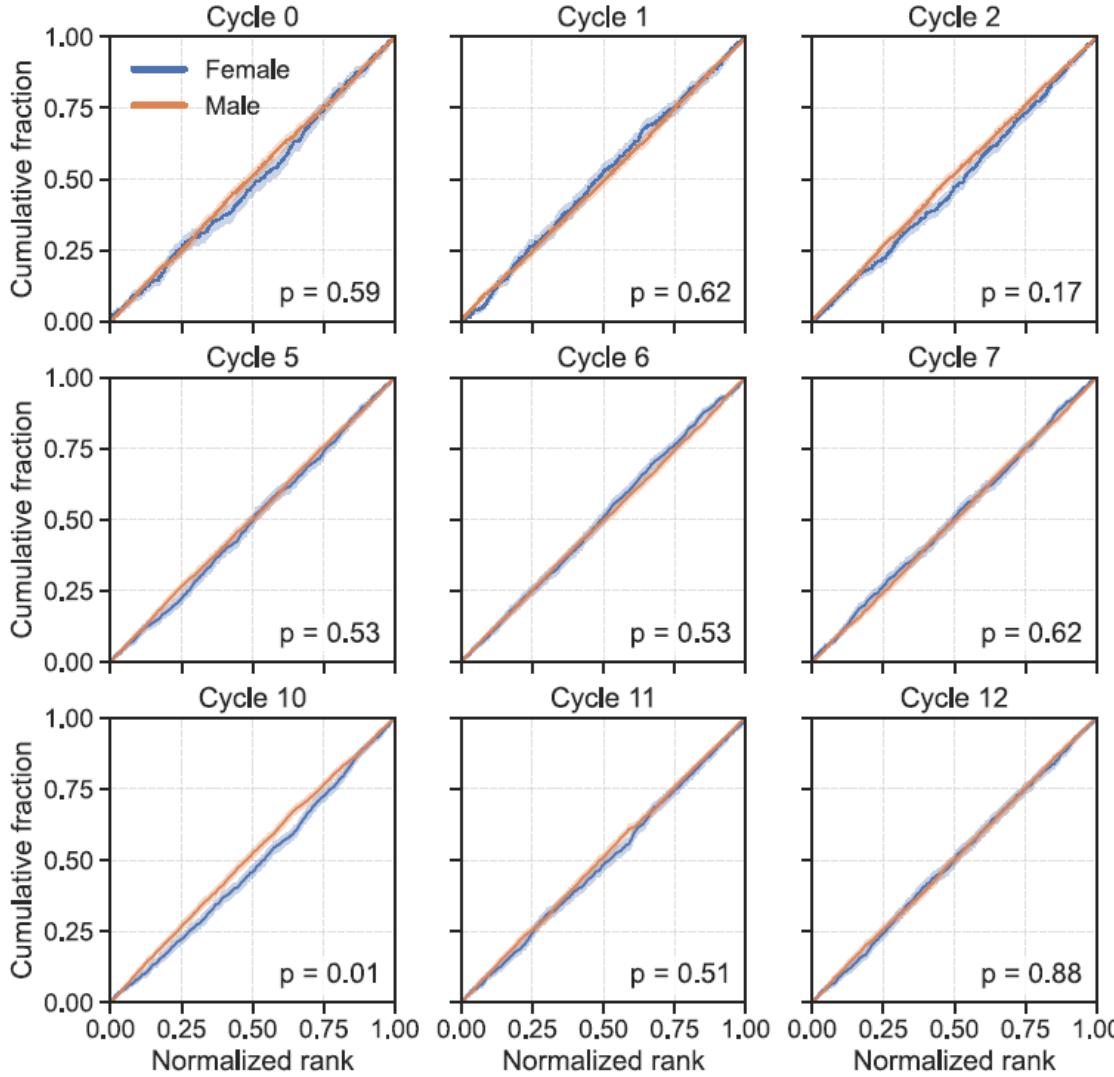
# Difference in rankings between EA and Europe



- In Cycles 0-9, EU PIs had better ranks than the EA PIs
- The difference has been decreasing since Cycle 8 onwards



# Difference in ranks by gender



No meaningful difference in rankings  
by gender in Cycle 12

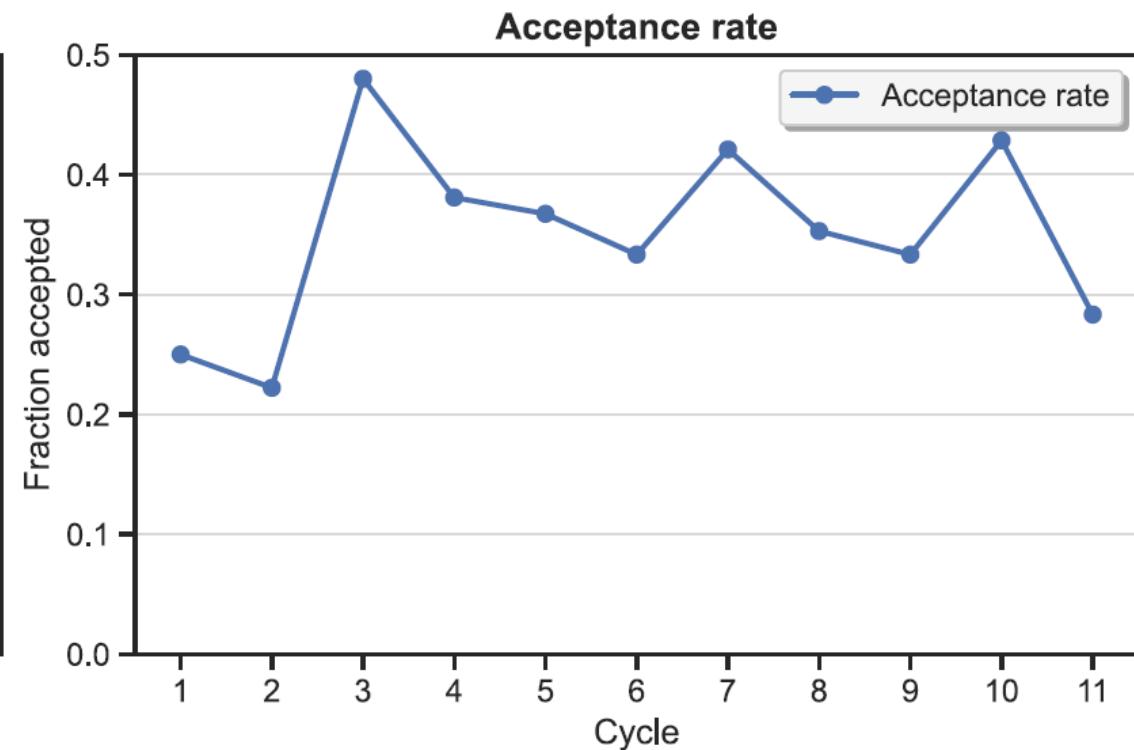
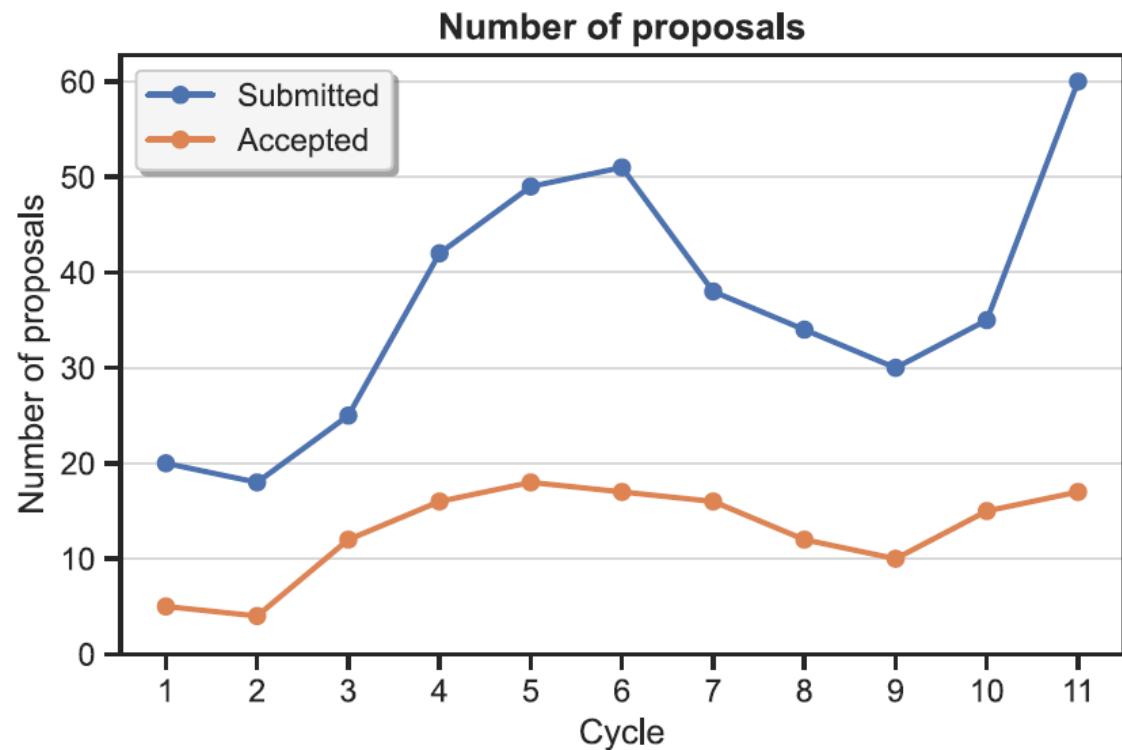
# Director's Discretionary Time (DDT) Proposals: Results from Cycles 1-11





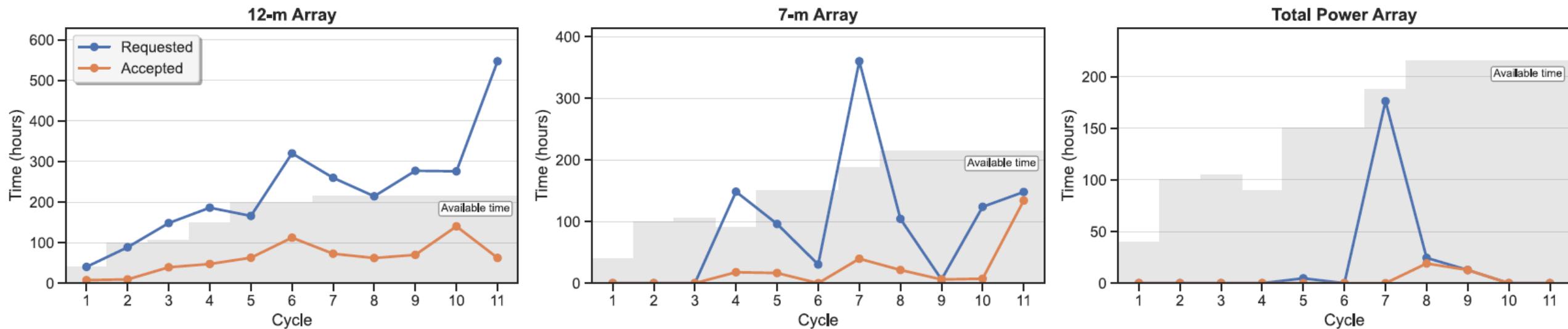
# Director's Discretionary Time (DDT) Overview

- Up to 5% of the observing time per cycle can be awarded through DDT
- DDT review process
  - The DDT review committee reviews the proposal
  - Committee's recommendation is sent to the ALMA Director
  - The ALMA Director decides whether to accept the proposal





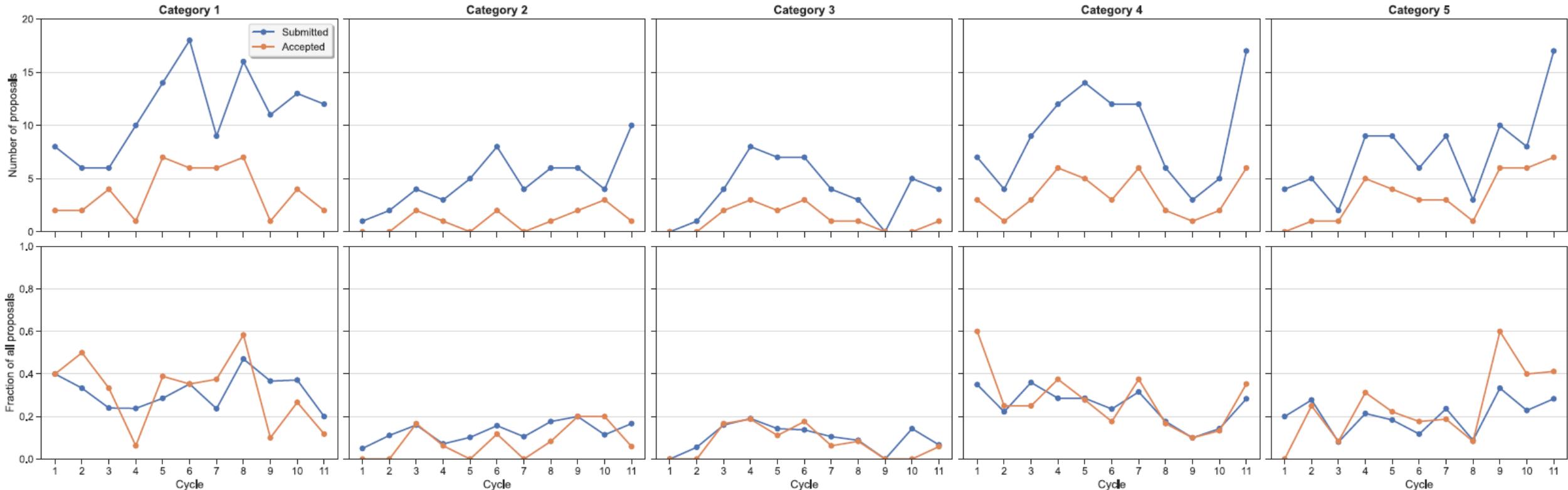
# DDT Observing Time by Cycle





# DDT Proposals by Science Category

Top row: Number of submitted (blue) and accepted (orange) proposals by science category  
Bottom row: Fraction



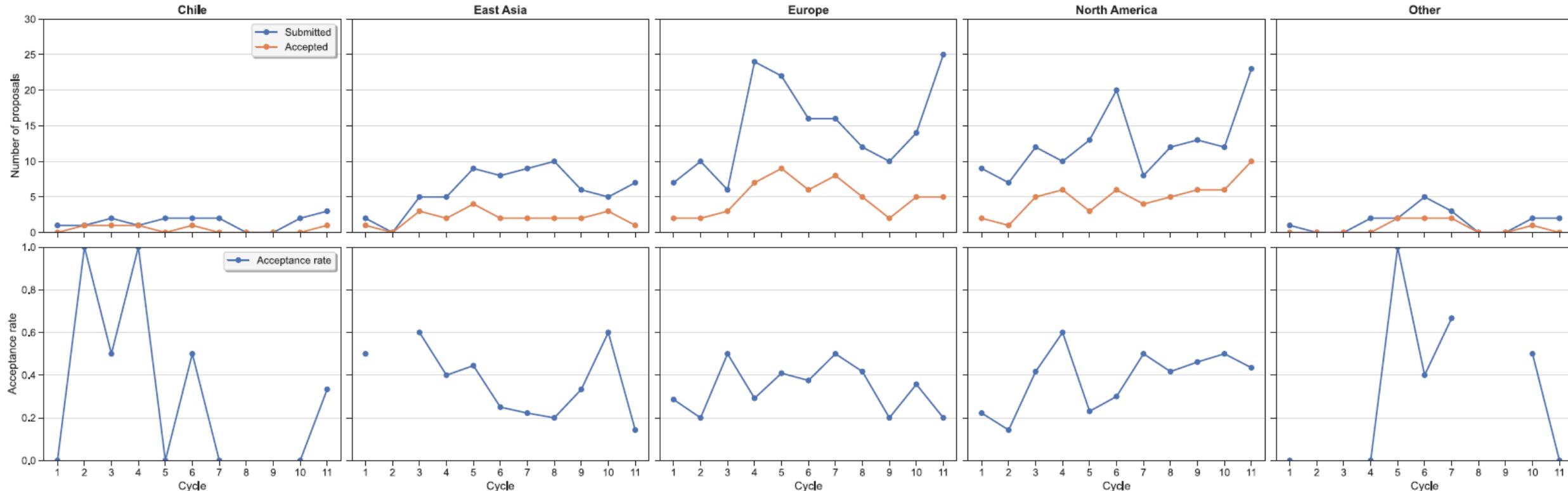
\*Category:

- 1: Cosmology and the high redshift universe
- 2: Galaxies and galactic nuclei

- 3: Interstellar medium, star formation, and astrochemistry
- 4: Circumstellar disks, exoplanets, and the solar system
- 5: Stellar evolution and the Sun



# DDT Proposals by Region





# Summary

- Cycle 12 proposal statistics
  - Number of submitted proposals slightly decreased in Cycle 12 over Cycle 11
  - Oversubscription rate continued to be high in all regions
  - Typical size of the accepted proposals increased → fewer proposals accepted
  - Acceptance rate is largely independent of the requested 12-m array time
  - 6 Large Programs accepted: 3 have EA co-Is
  - Trend for EA in overall rankings is positive
    - In Cycles 0-9, EU PIs had statistically better ranks than the EA PIs
    - The difference has been decreasing since Cycle 8
- DDT (until Cycle 11)
  - Acceptance rate is ~30-40%
  - The fraction of EA is smaller than that of NA and Europe

